## FLORENCE LAND RECONTOURING **LANDFILL NEW JERSEY** EPA ID# NJD980529143

#### **EPA REGION 2** CONGRESSIONAL DIST. 04

**Burlington County** In the Townships of Florence, Mansfield, and Springfield

> Other Names: **Gravel Pit**

### Site Description

The Florence Land Recontouring (FLR) Landfill is a 60-acre site that contained a 29-acre landfill, two lagoons, a pond, and two tanks. The FLR Landfill was operated as a municipal solid waste disposal facility from 1973 until late 1981, and the State of New Jersey licensed it to accept sanitary and non-chemical industrial wastes. The landfill was capped and closed in 1981. In 1975, the New Jersey Department of Environmental Protection (NJDEP) investigated chemical waste disposal at the site and found hazardous wastes consisting of phthalates, heavy metals, and vinyl chloride monomers, were illegally disposed of at the site. Elevated levels of hazardous substances were discovered in soils and ground water within the landfill. However, results of sampling and analysis of off-site wells over the years have shown that drinking water quality is within health standards. Approximately 4,500 people live within a 3-mile radius of the site. The area surrounding the site is primarily mixed agriculture and residential. The site is bordered by the Burlington County Resource Recovery Facility and by Assiscunk Creek, a tributary to the Delaware River, which is used for recreation and irrigation.

**Site Responsibility:** This site is being addressed through

Federal and State actions

**NPL LISTING HISTORY** 

Proposed Date: 09/01/83 Final Date: 09/01/84

#### **Threats and Contaminants**



The ground water and soils were contaminated with volatile organic compounds (VOCs), including methylene chloride and vinyl chloride, and the heavy metals arsenic, chromium, and lead. Leachate from the landfill contains VOCs and polycyclic aromatic hydrocarbons (PAHs). Residents in the area using the ground water for domestic purposes could be exposed should the contaminants migrate from the landfill into drinking water wells. Exposure through direct contact appears minimal, since the contamination is below the landfill cap.



### Cleanup Approach -

The site was addressed in two stages: an initial action and a long-term remedial phase focusing on cleanup of the entire site.

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**Initial Action:** In 1982, a clay cover was placed on the landfill during closure. A leachate collection system was installed, and the resulting leachate was placed into two lagoons constructed on another section of the property, and then disposed of at an off-

site wastewater treatment plant. The leachate lagoons were surrounded by a 5-foot-high fence with barbed wire around the top. Carbon adsorption filters were placed on top of the six leachate collection system manholes to collect the VOCs and to control odors.



**Entire Site:** In 1986, EPA chose the following remedy to clean up the site: (1) construction of a synthetic membrane and clay composite cap, a perimeter soil/Bentonite slurry wall, an upstream ground water interceptor system, and a new stormwater

management system; (2) leachate treatment and disposal at a municipal wastewater treatment facility; gas collection, and treatment; (3) removal and disposal of lagoon liquids and sediments, and other surface debris; (4) construction of a partial fence with warning signs; and (5) supplemental sampling of ground water, surface water, and sediments during the design phase. The design for the cleanup was completed in early 1991. The leachate lagoons were drained and closed. All major phases of the landfill remediation were completed in 1994. The permanent leachate disposal system was selected in 1998.

**Site Facts:** In January 1979, a Consent Order to alleviate and control further contamination was issued by the New Jersey Superior Court. Subsequent enforcement action by the NJDEP was required because of the lack of adherence to the terms of the Consent Order. In July 1981, Florence Land Recontouring, Inc. submitted a final closure plan, and operations terminated in November 1981.

# Cleanup Progress (Actual Contruction Complete)



The completion of all major phases of the landfill construction have significantly reduced the threats to public health and the environment. The permanent leachate disposal system was implemented in 1998.